

chain nodes :

7 8 10 26 27 28 29 30

ring nodes :

1 2 3 4 5 6 11 12 13 14 15 16 18 19 20 21 22 23

chain bonds :

5-26 6-7 7-8 8-10 16-20 26-27 27-28 27-29 29-30

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 18-19 18-23
19-20 20-21 21-22 22-23

exact/norm bonds :

5-26 6-7 7-8 8-10 11-12 11-16 12-13 13-14 14-15 15-16 16-20 26-27 27-28
27-29 29-30

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 18-19 18-23 19-20 20-21 21-22 22-23

isolated ring systems :

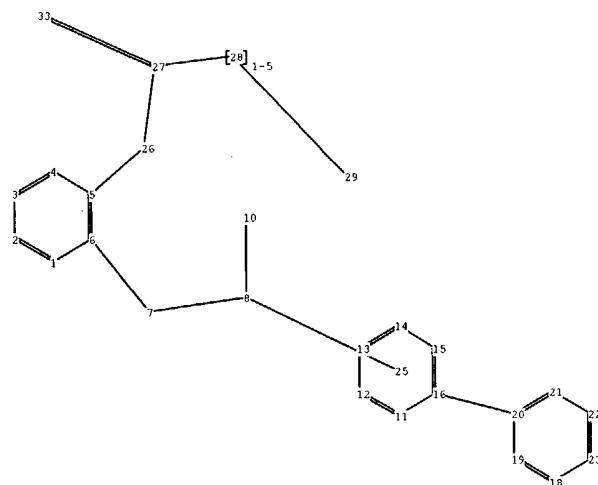
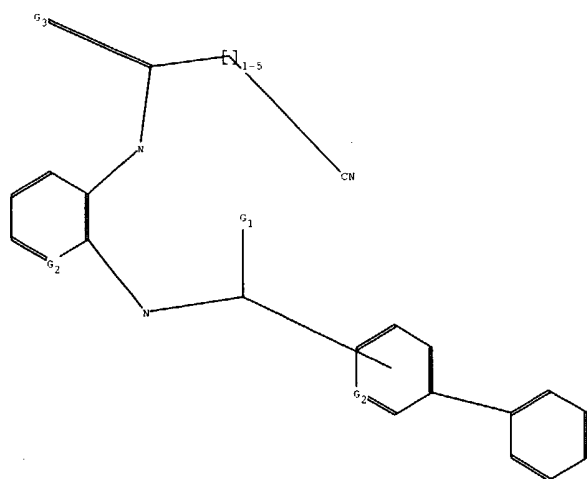
containing 1 : 11 : 18 :

G1:H,Ak

G2:N,CH

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS 11:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom
23:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS



chain nodes :

7 8 10 26 27 28 29 33

ring nodes :

1 2 3 4 5 6 11 12 13 14 15 16 18 19 20 21 22 23

chain bonds :

5-26 6-7 7-8 8-10 16-20 26-27 27-28 27-33 28-29

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 18-19 18-23
19-20 20-21 21-22 22-23

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-26 6-7 7-8 8-10 11-12 11-16 12-13 13-14 14-15
15-16 16-20 26-27 27-28 27-33 28-29

normalized bonds :

18-19 18-23 19-20 20-21 21-22 22-23

isolated ring systems :

containing 1 : 11 : 18 :

G1:H,Ak,OH,NH2,F

G2:N,CH

G3:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS 11:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom
23:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 33:CLASS

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated
 and searchable
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in
 CA/CAPLUS
NEWS 5 FEB 05 German (DE) application and patent publication number format
 changes
NEWS 6 MAR 03 MEDLINE and LMEEDLINE reloaded
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 8 MAR 03 FRANCEPAT now available on STN
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN
NEWS 10 MAR 29 WPIFV now available on STN
NEWS 11 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA
NEWS 12 APR 26 PROMT: New display field available
NEWS 13 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field
 available
NEWS 14 APR 26 LITALERT now available on STN
NEWS 15 APR 27 NLDB: New search and display fields available
NEWS 16 May 10 PROUSDDR now available on STN
NEWS 17 May 19 PROUSDDR: One FREE connect hour, per account, in both May
 and June 2004
NEWS 18 May 12 EXTEND option available in structure searching
NEWS 19 May 12 Polymer links for the POLYLINK command completed in REGISTRY
NEWS 20 May 17 FRFULL now available on STN
NEWS 21 May 27 STN User Update to be held June 7 and June 8 at the SLA 2004
 Conference
NEWS 22 May 27 New UPM (Update Code Maximum) field for more efficient patent
 SDIs in CAPLUS
NEWS 23 May 27 CAPLUS super roles and document types searchable in REGISTRY
NEWS 24 May 27 Explore APOLLIT with free connect time in June 2004

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
 MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
 AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 17:22:43 ON 06 JUN 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 17:23:01 ON 06 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 4 JUN 2004 HIGHEST RN 689739-78-4
DICTIONARY FILE UPDATES: 4 JUN 2004 HIGHEST RN 689739-78-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

L1 STRUCTURE UPLOADED

=> D L1

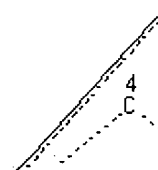
L1 HAS NO ANSWERS

L1 STR

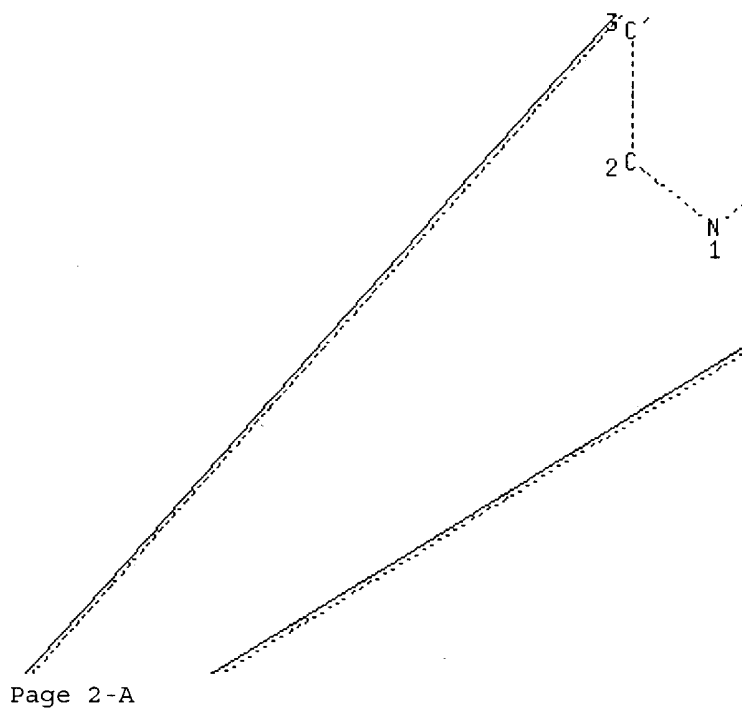
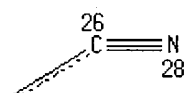
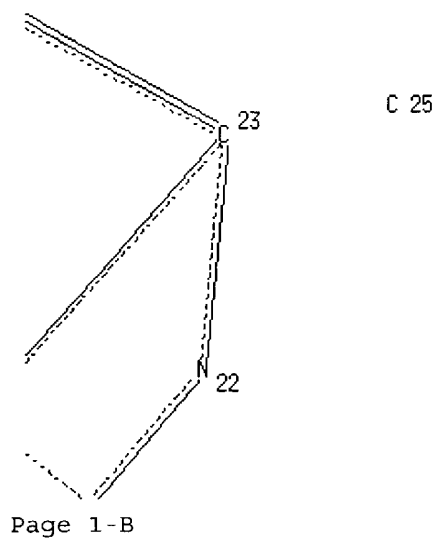
N 32 C M1

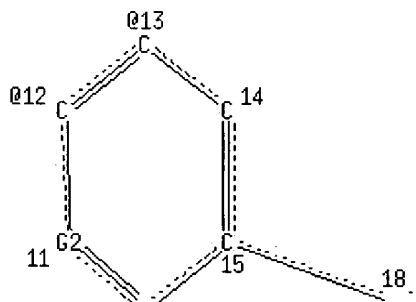
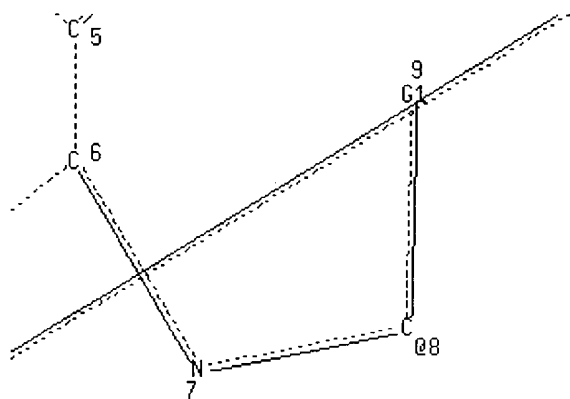
H 29 Ak 30

24 0.000

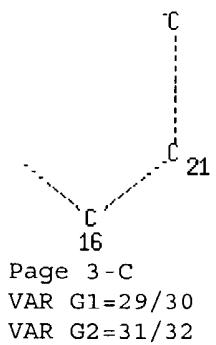
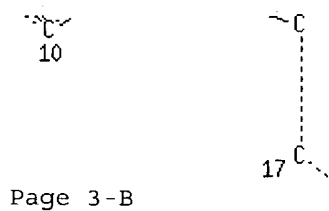
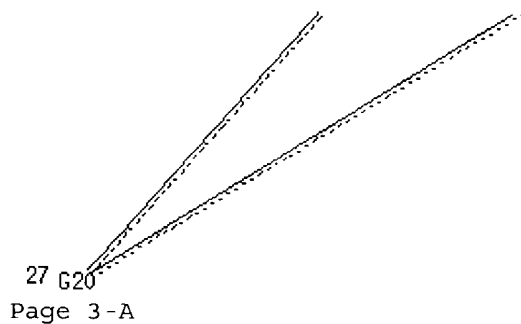
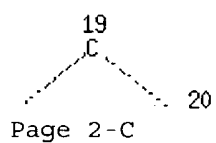


Page 1-A





Page 2-B



VAR G1=29/30
VAR G2=31/32

REP G20=(1-5) 25-23 25-26

VPA 8-12/13 S

NODE ATTRIBUTES:

HCOUNT	IS	M1	AT	32
NSPEC	IS	R	AT	1
NSPEC	IS	R	AT	2
NSPEC	IS	R	AT	3
NSPEC	IS	R	AT	4
NSPEC	IS	R	AT	5
NSPEC	IS	R	AT	6
NSPEC	IS	C	AT	7
NSPEC	IS	C	AT	8
NSPEC	IS	C	AT	9
NSPEC	IS	R	AT	10
NSPEC	IS	R	AT	11
NSPEC	IS	R	AT	12
NSPEC	IS	R	AT	13
NSPEC	IS	R	AT	14
NSPEC	IS	R	AT	15
NSPEC	IS	R	AT	16
NSPEC	IS	R	AT	17
NSPEC	IS	R	AT	18
NSPEC	IS	R	AT	19
NSPEC	IS	R	AT	20
NSPEC	IS	R	AT	21
NSPEC	IS	C	AT	22
NSPEC	IS	C	AT	23
NSPEC	IS	C	AT	24
NSPEC	IS	C	AT	25
NSPEC	IS	C	AT	26
NSPEC	IS	C	AT	27
NSPEC	IS	C	AT	28

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 7 8 22 23 24 25 26 28 29 30

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE

=> s 11

SAMPLE SEARCH INITIATED 17:30:38 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 7 TO 298

PROJECTED ANSWERS: 6 TO 266

L2 6 SEA SSS SAM L1

=> s 11 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 17:30:43 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 210 TO ITERATE

100.0% PROCESSED 210 ITERATIONS 188 ANSWERS
 SEARCH TIME: 00.00.01

L3 188 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	160.46	160.67

FILE 'HCAPLUS' ENTERED AT 17:30:46 ON 06 JUN 2004
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 6 Jun 2004 VOL 140 ISS 24
 FILE LAST UPDATED: 4 Jun 2004 (20040604/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 1 L3

=> d l4, ibib abs fhitr, 1

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text **Citing References**

ACCESSION NUMBER: 2004:182533 HCAPLUS
 DOCUMENT NUMBER: 140:235608
 TITLE: Preparation of 2-(biarylalkyl)amino-3-(cyanoalkanoylamino)pyridines as bradykinin B1 antagonists for treating pain and inflammation
 INVENTOR(S): Kuduk, Scott D.; Bock, Mark G.; Feng, Dong-mei; Su, Dai-shi; Wai, Jenny Miu-chun
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 28 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------


```

-----
US 2004044041      A1      20040304      US 2003-634426      20030805
PRIORITY APPLN. INFO.:      US 2002-401386P      P      20020806
OTHER SOURCE(S):      MARPAT 140:235608
GI

```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; m = 1-4; X, Y = CH, or one is CH and the other is N; R1, R2 = H, alkyl; R3 = H, alkyl, haloalkyl, etc.; R4 = H, NO₂, halo, etc.; R51, R52 = H, Me; or R51 and R52 together complete cycloalkyl ring; R61 = (un)substituted alkyl, cycloalkyl, alkenyl, etc.; R62, R63 = H, R61; with the proviso that not more than one of R61, R62 and R63 = heterocycle; R7 = H, alkyl, cycloalkyl, aryl, arylalkyl] which are bradykinin B1 antagonist compds. useful in the treatment or prevention of symptoms such as pain and inflammation assocd. with the bradykinin B1 pathway, were prepd. and formulated. E.g., a multi-step synthesis of II (starting from 4'-methyl-2-biphenylcarboxylic acid), was given. The compds. I have affinity for B1 receptor with IC₅₀ values of < 5 µM.

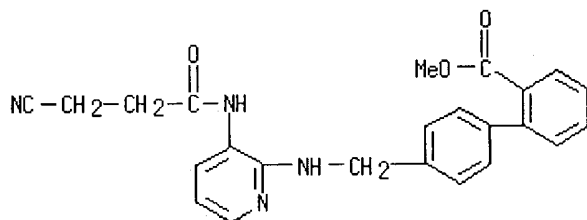
IT **668472-10-4P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 2-(biarylalkyl)amino-3-(cyanoalkanoylamino)pyridines as bradykinin B1 antagonists)

RN **668472-10-4** HCAPLUS

CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[[[3-[(3-cyano-1-oxopropyl)amino]-2-pyridinyl]amino]methyl]-, methyl ester (9CI) (CA INDEX NAME)



=> file caold

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

7.12	167.79
------	--------

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION

CA SUBSCRIBER PRICE

-0.69	-0.69
-------	-------

FILE 'CAOLD' ENTERED AT 17:31:21 ON 06 JUN 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> d his

(FILE 'HOME' ENTERED AT 17:22:43 ON 06 JUN 2004)

FILE 'REGISTRY' ENTERED AT 17:23:01 ON 06 JUN 2004

L1 STRUCTURE UPLOADED

L2 6 S L1

L3 188 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 17:30:46 ON 06 JUN 2004

L4 1 S L3

FILE 'CAOLD' ENTERED AT 17:31:21 ON 06 JUN 2004

=> s l3

L5 0 L3

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	168.21
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.69

FILE 'REGISTRY' ENTERED AT 17:31:26 ON 06 JUN 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 JUN 2004 HIGHEST RN 689739-78-4

DICTIONARY FILE UPDATES: 4 JUN 2004 HIGHEST RN 689739-78-4

TSKA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
L6 STRUCTURE UPLOADED

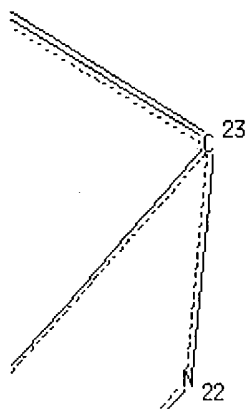
=> d 16
L6 HAS NO ANSWERS
L6 STR
0 36 S 37

N 38 C M1

H 29 Ak3300 B2 N M2 F 33

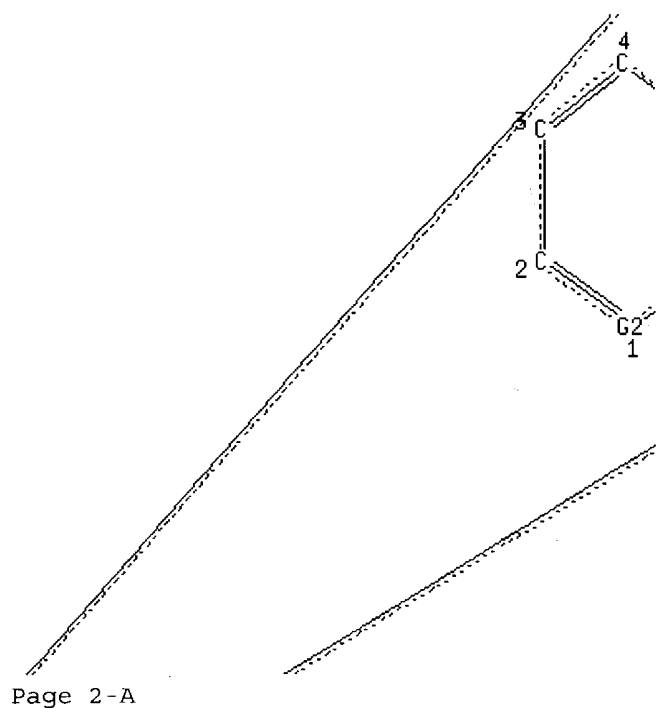
27 G3

Page 1-A

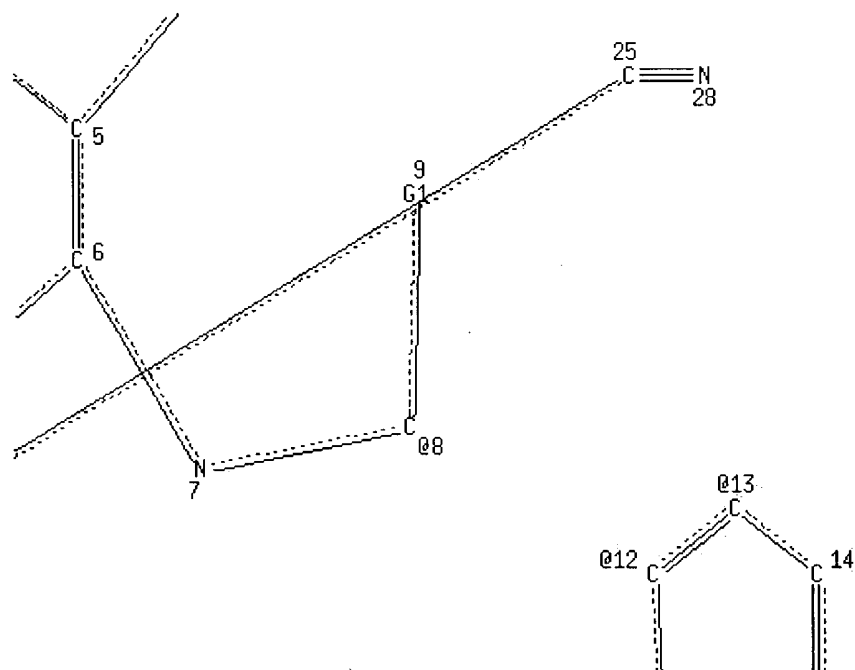


C 24

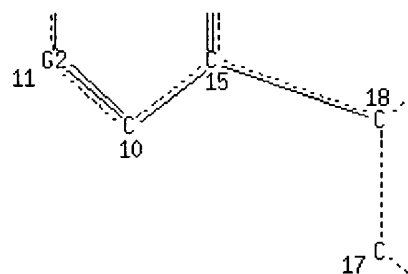
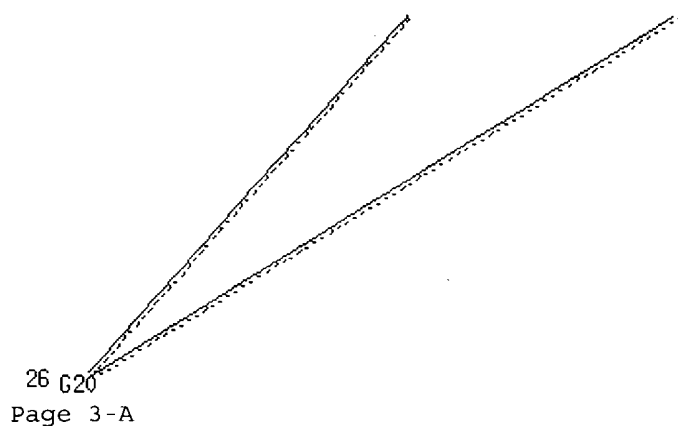
Page 1-B



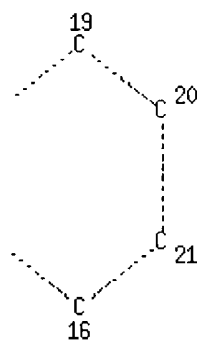
Page 2-A



Page 2-B



Page 3-B



Page 3-C

VAR G1=29/30/31/32/33

VAR G2=34/35

VAR G3=36/37

REP G20=(1-5) 24-23 24-25

VPA 8-12/13 S

NODE ATTRIBUTES:

HCOUNT IS M1 AT 31

HCOUNT IS M2 AT 32

HCOUNT IS M1 AT 35

NSPEC	IS	R	AT	1
-------	----	---	----	---

NSPEC	IS	R	AT	2
-------	----	---	----	---

NSPEC	IS	R	AT	3
-------	----	---	----	---

NSPEC	IS	R	AT	4
-------	----	---	----	---

NSPEC	IS	R	AT	5
-------	----	---	----	---

NSPEC	IS	R	AT	6
-------	----	---	----	---

NSPEC	IS	R	III	8
NSPEC	IS	C	AT	7

NSPEC	IS	C	AT	8
-------	----	---	----	---

NSPEC	IS	C	AT	9
NSPEC	IS	C	AT	9

NSPEC	IS	C	AT	9
NSPEC	IS	R	AT	10

NSPEC	IS	R	AT	10
NSPEC	IS	R	AT	11

NSPEC	IS	R	AT	11
NSPEC	IS	R	AT	12

NSPEC	IS	R	AT	12
NSPEC	IS	R	AT	13

NSPEC IS R AT 14
 NSPEC IS R AT 15
 NSPEC IS R AT 16
 NSPEC IS R AT 17
 NSPEC IS R AT 18
 NSPEC IS R AT 19
 NSPEC IS R AT 20
 NSPEC IS R AT 21
 NSPEC IS C AT 22
 NSPEC IS C AT 23
 NSPEC IS C AT 24
 NSPEC IS C AT 25
 NSPEC IS C AT 26
 NSPEC IS C AT 27
 NSPEC IS C AT 28
 DEFAULT MLEVEL IS ATOM
 MLEVEL IS CLASS AT 7 8 22 23 24 25 28 29 30 31 32 33 36 37
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC I
 NUMBER OF NODES IS 37

STEREO ATTRIBUTES: NONE

=> s 16
 SAMPLE SEARCH INITIATED 17:35:57 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 6 ANSWERS
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
 PROJECTED ITERATIONS: 11 TO 389
 PROJECTED ANSWERS: 6 TO 266

L7 6 SEA SSS SAM L6

=> s 16 full
 THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
 FULL SEARCH INITIATED 17:36:01 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 290 TO ITERATE

100.0% PROCESSED 290 ITERATIONS 188 ANSWERS
 SEARCH TIME: 00.00.01

L8 188 SEA SSS FUL L6

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	158.36	326.57
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.69

FILE 'HCAPLUS' ENTERED AT 17:36:04 ON 06 JUN 2004
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 6 Jun 2004 VOL 140 ISS 24
 FILE LAST UPDATED: 4 Jun 2004 (20040604/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 17:22:43 ON 06 JUN 2004)

FILE 'REGISTRY' ENTERED AT 17:23:01 ON 06 JUN 2004

L1 STRUCTURE UPLOADED
 L2 6 S L1
 L3 188 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 17:30:46 ON 06 JUN 2004

L4 1 S L3

FILE 'CAOLD' ENTERED AT 17:31:21 ON 06 JUN 2004

L5 0 S L3

FILE 'REGISTRY' ENTERED AT 17:31:26 ON 06 JUN 2004

L6 STRUCTURE UPLOADED
 L7 6 S L6
 L8 188 S L6 FULL

FILE 'HCAPLUS' ENTERED AT 17:36:04 ON 06 JUN 2004

=> s l8/thu

1 L8
 597239 THU/RL
 L9 1 L8/THU
 (L8 (L) THU/RL)

=> s l9 not l3

1 L3
 L10 0 L9 NOT L3

=> d l9, ibib abs fhitr, 1

L9 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

Full
Text

Citing
References

ACCESSION NUMBER: 2004:182533 HCAPLUS
 DOCUMENT NUMBER: 140:235608
 TITLE: Preparation of 2-(biarylalkyl)amino-3-(cyanoalkanoylamino)pyridines as bradykinin B1 antagonists for treating pain and inflammation
 INVENTOR(S): Kuduk, Scott D.; Bock, Mark G.; Feng, Dong-mei; Su, Dai-shi; Wai, Jenny Miu-chun
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 28 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004044041	A1	20040304	US 2003-634426	20030805
PRIORITY APPLN. INFO.:			US 2002-401386P	P 20020806
OTHER SOURCE(S):		MARPAT 140:235608		

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; m = 1-4; X, Y = CH, or one is CH and the other is N; R1, R2 = H, alkyl; R3 = H, alkyl, haloalkyl, etc.; R4 = H, NO2, halo, etc.; R51, R52 = H, Me; or R51 and R52 together complete cycloalkyl ring; R61 = (un)substituted alkyl, cycloalkyl, alkenyl, etc.; R62, R63 = H, R61; with the proviso that not more than one of R61, R62 and R63 = heterocycle; R7 = H, alkyl, cycloalkyl, aryl, arylalkyl] which are bradykinin B1 antagonist compds. useful in the treatment or prevention of symptoms such as pain and inflammation assocd. with the bradykinin B1 pathway, were prepd. and formulated. E.g., a multi-step synthesis of II (starting from 4'-methyl-2-biphenylcarboxylic acid), was given. The compds. I have affinity for B1 receptor with IC50 values of < 5 μ M.

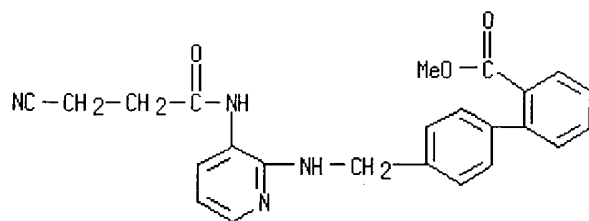
IT **668472-10-4P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU** (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 2-(biarylalkyl)amino-3-(cyanoalkanoylamino)pyridines as bradykinin B1 antagonists)

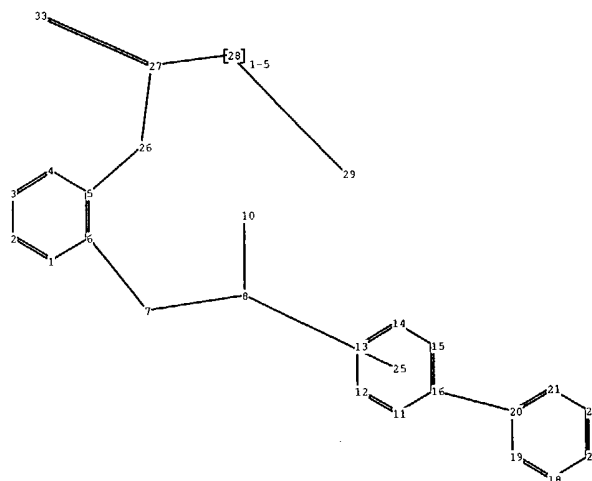
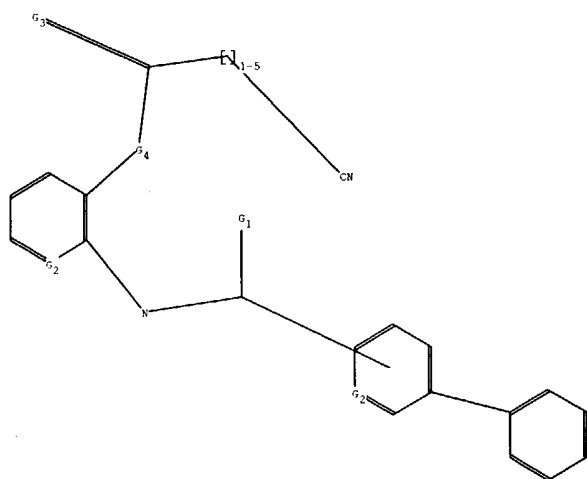
RN **668472-10-4** HCAPLUS

CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[[[3-[(3-cyano-1-oxopropyl)amino]-2-pyridinyl]amino]methyl]-, methyl ester (9CI) (CA INDEX NAME)



=>

C:\stnweb\queries\56.str



chain nodes :

7 8 10 26 27 28 29 33

ring nodes :

1 2 3 4 5 6 11 12 13 14 15 16 18 19 20 21 22 23

chain bonds :

5-26 6-7 7-8 8-10 16-20 26-27 27-28 27-33 28-29

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 18-19 18-23

19-20 20-21 21-22 22-23

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-26 6-7 7-8 8-10 11-12 11-16 12-13 13-14 14-15

15-16 16-20 26-27 27-28 27-33 28-29

normalized bonds :

18-19 18-23 19-20 20-21 21-22 22-23

isolated ring systems :

containing 1 : 11 : 18 :

G1:H,Ak,OH,NH2,F

G2:N,CH

G3:O,S

G4:O,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS 11:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom
23:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 33:CLASS

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated
 and searchable
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in
 CA/CAPLUS
NEWS 5 FEB 05 German (DE) application and patent publication number format
 changes
NEWS 6 MAR 03 MEDLINE and LMEMLINE reloaded
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 8 MAR 03 FRANCEPAT now available on STN
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN
NEWS 10 MAR 29 WPIFV now available on STN
NEWS 11 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA
NEWS 12 APR 26 PROMT: New display field available
NEWS 13 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field
 available
NEWS 14 APR 26 LITALERT now available on STN
NEWS 15 APR 27 NLDB: New search and display fields available
NEWS 16 May 10 PROUSDDR now available on STN
NEWS 17 May 19 PROUSDDR: One FREE connect hour, per account, in both May
 and June 2004
NEWS 18 May 12 EXTEND option available in structure searching
NEWS 19 May 12 Polymer links for the POLYLINK command completed in REGISTRY
NEWS 20 May 17 FRFULL now available on STN
NEWS 21 May 27 STN User Update to be held June 7 and June 8 at the SLA 2004
 Conference
NEWS 22 May 27 New UPM (Update Code Maximum) field for more efficient patent
 SDIs in CAPLUS
NEWS 23 May 27 CAPLUS super roles and document types searchable in REGISTRY
NEWS 24 May 27 Explore APOLLIT with free connect time in June 2004

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
 MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
 AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 18:28:29 ON 06 JUN 2004

=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 18:28:56 ON 06 JUN 2004
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
 provided by InfoChem.

STRUCTURE FILE UPDATES: 4 JUN 2004 HIGHEST RN 689739-78-4
 DICTIONARY FILE UPDATES: 4 JUN 2004 HIGHEST RN 689739-78-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
 information enter HELP PROP at an arrow prompt in the file or refer
 to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> file hcaplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.42	0.63

FILE 'HCAPLUS' ENTERED AT 18:29:24 ON 06 JUN 2004
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
 held by the publishers listed in the PUBLISHER (PB) field (available
 for records published or updated in Chemical Abstracts after December
 26, 1996), unless otherwise indicated in the original publications.
 The CA Lexicon is the copyrighted intellectual property of the
 the American Chemical Society and is provided to assist you in searching
 databases on STN. Any dissemination, distribution, copying, or storing
 of this information, without the prior written consent of CAS, is
 strictly prohibited.

FILE COVERS 1907 - 6 Jun 2004 VOL 140 ISS 24
 FILE LAST UPDATED: 4 Jun 2004 (20040604/ED)

This file contains CAS Registry Numbers for easy and accurate
 substance identification.

```
=> s bradykinin and pain?
      16399 BRADYKININ
      191 BRADYKININS
      16426 BRADYKININ
          (BRADYKININ OR BRADYKININS)
      119947 PAIN?
L1      908 BRADYKININ AND PAIN?
```

=> s bradykinin () ?agonist

16399 BRADYKININ

191 BRADYKININS

16426 BRADYKININ

(BRADYKININ OR BRADYKININS)

202089 ?AGONIST

L2 535 BRADYKININ (W) ?AGONIST

=> s l2 and pain

33270 PAIN

848 PAINS

33878 PAIN

(PAIN OR PAINS)

L3 47 L2 AND PAIN

=> s l3 and dt/review

'REVIEW' IS NOT A VALID FIELD CODE

0 DT/REVIEW

L4 0 L3 AND DT/REVIEW

=> s l3 and review/dt

1732111 REVIEW/DT

L5 6 L3 AND REVIEW/DT

=> d l5, ibib abs hitstr, 1-6

L5 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full
Text

Citing
References

ACCESSION NUMBER: 2002:148931 HCAPLUS

DOCUMENT NUMBER: 136:145353

TITLE: **Bradykinin antagonist: current status and perspective**

AUTHOR(S): Hirayama, Yoshitaka; Kayakiri, Hiroshi

CORPORATE SOURCE: Medicinal Biology Research Laboratories, Fujisawa
Pharmaceutical Co., Ltd., Yodogawa-ku, Osaka,
532-8514, Japan

SOURCE: Nippon Yakurigaku Zasshi (2002), 119(1), 45-53
CODEN: NYKZAU; ISSN: 0015-5691

PUBLISHER: Nippon Yakuri Gakkai

DOCUMENT TYPE: Journal; **General Review**

LANGUAGE: Japanese

AB A review. The kallikrein-kinin system plays an important role in many
physiol. and pathophysiol. conditions such as homeostasis of circulation,
inflammation/allergy, **pain**, shock, etc. Two types of kinin receptor are
known, bradykinin (BK) B1 receptor and BK B2 receptor. B2 receptors are
constitutively expressed and mediate most physiol. actions of kinins,
whereas B1 receptors are highly inducible upon inflammatory stimulation or
tissue injury, suggesting that they are involved in inflammation and/or
nociception. Only three peptide type B2 antagonists, NPC 567, CP-0127,
and HOE-140, have been evaluated in clin. studies so far, and some
beneficial effects of B2 antagonists have been shown for rhinitis, asthma,
systemic inflammatory response syndrome/sepsis, and brain injury.
However, the results were less convincing than expected. Now several
potent and orally active nonpeptide B2-receptor antagonists have been
found, which are expected to overcome the weak point of the peptide type
antagonists and clarify the therapeutic potential of the B2-receptor
antagonist for novel indications as well as those mentioned above. As for
B1 receptors, no antagonist has been tested in a clin. trial. The
important role of B1 receptors is just being elucidated by use of peptide
type antagonists or B1 receptor gene knockout mice. The further

development of newer B1 antagonists and clin. evaluation is desired.

L5 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citing
References

ACCESSION NUMBER: 2001:298214 HCAPLUS
DOCUMENT NUMBER: 134:294182
TITLE: Inflammation-allergy and prostanoids. (1) Prostanoids
in experimental inflammatory reaction
AUTHOR(S): Ueno, Akinori; Ohishi, Sachiko
CORPORATE SOURCE: Dep. Pharmacol., Sch. Pharm. Sci., Kitasato Univ.,
5-9-1 Shirokane, Minato-ku, Tokyo, 108-8642, Japan
SOURCE: Nippon Yakurigaku Zasshi (2001), 117(4), 255-261
CODEN: NYKZAU; ISSN: 0015-5691
PUBLISHER: Nippon Yakuri Gakkai
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese

AB A review with 22 refs. It is known that prostaglandins (PGs) modify the inflammatory reaction in concert with other biol. active mediators. However, characteristics of these interactions or modulating actions have not yet been clarified well. Recently, the prodn. of mice with specific receptor deficiencies by using the gene targeting procedure for PG receptors has accelerated elucidation of the roles of PGs through correlation of their phenotypes and exptl. features. Here I discuss roles of PGs in exptl. paw edema, the writhing reaction of a **pain** model, and regulation of cytokine formation, as detd. using some PG-receptor-deficient mice. From the expt. of carrageenin-induced paw edema in IP receptor-deficient mice, with an indomethacin or **bradykinin antagonist**, we conclude that bradykinin initially induces paw swelling and then stimulates the release PGI₂, which in turn enhances the swelling with bradykinin. By comparing the writhing responses in IP-deficient and wild-type mice, we found that PGI₂ is a main mediator for this **pain** reaction. However, in the LPS-pretreated mice, not only PGI₂ but also other PGs produced by COX-2 may be involved in **pain** induction. Formation of TNF α and IL-10 was modified with PGI₂ or PGE₂; the formation of TNF α was down-regulated by the stimulation via IP-, EP₂- or EP₄ receptor, but that of IL-10 was up-regulated by these receptors, resulting in an anti-inflammatory effect.

L5 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citing
References

ACCESSION NUMBER: 2000:584130 HCAPLUS
DOCUMENT NUMBER: 133:246693
TITLE: Bradykinin antagonists: new opportunities
AUTHOR(S): Bock, Mark G.; Longmore, Jeanette
CORPORATE SOURCE: Merck Research Laboratories, West Point, PA, 19486,
USA
SOURCE: Current Opinion in Chemical Biology (2000), 4(4),
401-406
CODEN: COCBF4; ISSN: 1367-5931
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: English

AB A review with 40 refs. The pro-inflammatory, **pain** producing, and cardiovascular effects of bradykinin B₂ receptor activation are well characterized. Bradykinin B₁ receptors also produce inflammation and **pain**. Therefore, antagonists are expected to be anti-inflammatory/analgesic drugs. Other exploitable clin. opportunities may exist. The newly discovered non-peptide B₂ receptor antagonists and the

QD50. C87

equiv. B1 receptor pharmacol. agents, which are in the pipeline, are suitable preclin. tools to properly evaluate potential utilities.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citing
References

ACCESSION NUMBER: 1997:492671 HCAPLUS
DOCUMENT NUMBER: 127:170901
TITLE: Nonconventional analgesics: bradykinin antagonists
AUTHOR(S): Elguero, Jose; Rozas, Isabel
CORPORATE SOURCE: Instituto de Quimica Medica (C. S. I. C.), Spain
SOURCE: Anales de la Real Academia de Farmacia (1997), 63(1), 173-190
CODEN: ARAFAY; ISSN: 0034-0618
PUBLISHER: Real Academia de Farmacia
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Spanish

AB A review with 34 refs. Bradykinin and kallidin, "kinins", are generated by the activity of kallikreins (proteolytic enzymes) on kininogens. Kinins elicit pathophysiol. responses including **pain** and hyperalgesia. Kinins receptors are classified according to the relative potencies of agonist and antagonists. Regoli and Barabe proposed two subtypes of receptors, B1 and B2. Hundreds of agonists analogs of bradykinin were prepd. before the first antagonist compds. appeared. Synthetic efforts have been oriented towards peptidic analogs until few years ago when the search of non-peptidic antagonists started. The distribution of receptor B1 in the human being is very limited and probably this subtype plays an unimportant role on human diseases. Two generation of peptidic antagonists of the B2 receptor have been developed. The second generation has compds. two orders of magnitude more potent as analgesics than the first generation ones and the most important deriv. was icatibant. The first non-peptidic antagonist of the B2 receptor, described in 1993, has two phosphonium cations sepd. by a modified amino acid. Many derivs. of this dication have been prepd. Another non-peptidic compd. antagonist of B2 is the natural product Martinelline. Mol. modeling and QSAR studies have been carried out on bradykinin as well as on its antagonists.

L5 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citing
References

ACCESSION NUMBER: 1993:401036 HCAPLUS
DOCUMENT NUMBER: 119:1036
TITLE: Therapeutic prospects of bradykinin receptor antagonists
AUTHOR(S): Sharma, J. N.
CORPORATE SOURCE: Sch. Med. Sci., Univ. Sains Malaysia, Kubang Kerian, 16150, Malay.
SOURCE: General Pharmacology (1993), 24(2), 267-74
CODEN: GEPHDP; ISSN: 0306-3623
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: English

AB A review with 77 refs. Bradykinin (BK) and related kinins may act on 4 types of receptors designated as B1, B2, B3, and B4. It seems that the B2 receptors are most commonly found in various vascular and non-vascular smooth muscles, whereas B1 receptors are formed in vitro during trauma, and injury, and are found in bone tissues. These BK receptors are involved in the regulations of various physiol. and pathol. processes. The mode of kinin actions are based upon the interactions between the

kinin and their specific receptors, which can led to activation of several second-messenger systems. Numerous BK receptor antagonists have been synthesized with prime aim to treat diseases caused by excessive kinin prodn. These diseases are RA, inflammatory diseases of the bowel, asthma, rhinitis and sore throat, allergic reactions, **pain**, inflammatory skin disorders, endotoxin and anaphylactic shock and coronary heart diseases. On the other hand, BK receptor antagonists could be contraindicated in hypertension, since these drugs may antagonize the antihypertensive therapy and/or may trigger the hypertensive crisis. It is worth suggesting that the BK receptor agonists might be useful antihypertensive drugs.

L5 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
--------------	----------------------

ACCESSION NUMBER: 1991:421390 HCAPLUS
 DOCUMENT NUMBER: 115:21390
 TITLE: Bradykinin antagonists in **pain** and inflammation
 AUTHOR(S): Steranka, Larry R.; Burch, Ronald M.
 CORPORATE SOURCE: Nova Pharm. Corp., Baltimore, MD, USA
 SOURCE: Inflammatory Disease and Therapy (1990), 5(Bradykinin Antagonists), 191-211
 CODEN: IDITE8; ISSN: 1047-5028
 DOCUMENT TYPE: Journal; **General Review**
 LANGUAGE: English

AB A review with 74 refs. discussing the effects of peptide bradykinin antagonists and certain kallikrein inhibitors on models of inflammation and **pain**.

=> d his

(FILE 'HOME' ENTERED AT 18:28:29 ON 06 JUN 2004)

FILE 'REGISTRY' ENTERED AT 18:28:56 ON 06 JUN 2004

FILE 'HCAPLUS' ENTERED AT 18:29:24 ON 06 JUN 2004

L1 908 S BRADYKININ AND PAIN?
 L2 535 S BRADYKININ () ?AGONIST
 L3 47 S L2 AND PAIN
 L4 0 S L3 AND DT/REVIEW
 L5 6 S L3 AND REVIEW/DT

=> s l2 and inflamm?

182244 INFLAMM?

L6 117 L2 AND INFLAMM?

=> s l6 and review/dt

1732111 REVIEW/DT

L7 14 L6 AND REVIEW/DT

=> d his

(FILE 'HOME' ENTERED AT 18:28:29 ON 06 JUN 2004)

FILE 'REGISTRY' ENTERED AT 18:28:56 ON 06 JUN 2004

FILE 'HCAPLUS' ENTERED AT 18:29:24 ON 06 JUN 2004

L1 908 S BRADYKININ AND PAIN?
 L2 535 S BRADYKININ () ?AGONIST

L3 47 S L2 AND PAIN
 L4 0 S L3 AND DT/REVIEW
 L5 6 S L3 AND REVIEW/DT
 L6 117 S L2 AND INFLAMM?
 L7 14 S L6 AND REVIEW/DT

=> s 17 and 15

L8 5 L7 AND L5

=> d 18, ibib abs, 1-5

L8 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
--------------	----------------------

ACCESSION NUMBER: 2002:148931 HCAPLUS
 DOCUMENT NUMBER: 136:145353
 TITLE: **Bradykinin antagonist: current status and perspective**
 AUTHOR(S): Hirayama, Yoshitaka; Kayakiri, Hiroshi
 CORPORATE SOURCE: Medicinal Biology Research Laboratories, Fujisawa
 Pharmaceutical Co., Ltd., Yodogawa-ku, Osaka,
 532-8514, Japan
 SOURCE: Nippon Yakurigaku Zasshi (2002), 119(1), 45-53
 CODEN: NYKZAU; ISSN: 0015-5691
 PUBLISHER: Nippon Yakuri Gakkai
 DOCUMENT TYPE: Journal; **General Review**
 LANGUAGE: Japanese

AB A review. The kallikrein-kinin system plays an important role in many
 physiol. and pathophysiol. conditions such as homeostasis of circulation,
inflammation/allergy, pain, shock, etc. Two types of kinin receptor
 are known, bradykinin (BK) B1 receptor and BK B2 receptor. B2 receptors
 are constitutively expressed and mediate most physiol. actions of kinins,
 whereas B1 receptors are highly inducible upon **inflammatory** stimulation
 or tissue injury, suggesting that they are involved in **inflammation**
 and/or nociception. Only three peptide type B2 antagonists, NPC 567,
 CP-0127, and HOE-140, have been evaluated in clin. studies so far, and
 some beneficial effects of B2 antagonists have been shown for rhinitis,
 asthma, systemic **inflammatory** response syndrome/sepsis, and brain
 injury. However, the results were less convincing than expected. Now
 several potent and orally active nonpeptide B2-receptor antagonists have
 been found, which are expected to overcome the weak point of the peptide
 type antagonists and clarify the therapeutic potential of the B2-receptor
 antagonist for novel indications as well as those mentioned above. As for
 B1 receptors, no antagonist has been tested in a clin. trial. The
 important role of B1 receptors is just being elucidated by use of peptide
 type antagonists or B1 receptor gene knockout mice. The further
 development of newer B1 antagonists and clin. evaluation is desired.

L8 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
--------------	----------------------

ACCESSION NUMBER: 2001:298214 HCAPLUS
 DOCUMENT NUMBER: 134:294182
 TITLE: **Inflammation-allergy and prostanoids. (1)**
 Prostanoids in experimental **inflammatory** reaction
 AUTHOR(S): Ueno, Akinori; Ohishi, Sachiko
 CORPORATE SOURCE: Dep. Pharmacol., Sch. Pharm. Sci., Kitasato Univ.,
 5-9-1 Shirokane, Minato-ku, Tokyo, 108-8642, Japan
 SOURCE: Nippon Yakurigaku Zasshi (2001), 117(4), 255-261
 CODEN: NYKZAU; ISSN: 0015-5691
 PUBLISHER: Nippon Yakuri Gakkai

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review with 22 refs. It is known that prostaglandins (PGs) modify the **inflammatory** reaction in concert with other biol. active mediators. However, characteristics of these interactions or modulating actions have not yet been clarified well. Recently, the prodn. of mice with specific receptor deficiencies by using the gene targeting procedure for PG receptors has accelerated elucidation of the roles of PGs through correlation of their phenotypes and exptl. features. Here I discuss roles of PGs in exptl. paw edema, the writhing reaction of a **pain** model, and regulation of cytokine formation, as detd. using some PG-receptor-deficient mice. From the expt. of carrageenin-induced paw edema in IP receptor-deficient mice, with an indomethacin or **bradykinin antagonist**, we conclude that bradykinin initially induces paw swelling and then stimulates the release PGI₂, which in turn enhances the swelling with bradykinin. By comparing the writhing responses in IP-deficient and wild-type mice, we found that PGI₂ is a main mediator for this **pain** reaction. However, in the LPS-pretreated mice, not only PGI₂ but also other PGs produced by COX-2 may be involved in **pain** induction. Formation of TNF α and IL-10 was modified with PGI₂ or PGE₂; the formation of TNF α was down-regulated by the stimulation via IP-, EP2- or EP4 receptor, but that of IL-10 was up-regulated by these receptors, resulting in an anti-**inflammatory** effect.

L8 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
-----------	-------------------

ACCESSION NUMBER: 2000:584130 HCAPLUS
 DOCUMENT NUMBER: 133:246693
 TITLE: Bradykinin antagonists: new opportunities
 AUTHOR(S): Bock, Mark G.; Longmore, Jeanette
 CORPORATE SOURCE: Merck Research Laboratories, West Point, PA, 19486, USA
 SOURCE: Current Opinion in Chemical Biology (2000), 4(4), 401-406
 CODEN: COCBF4; ISSN: 1367-5931
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English

AB A review with 40 refs. The pro-**inflammatory**, **pain** producing, and cardiovascular effects of bradykinin B2 receptor activation are well characterized. Bradykinin B1 receptors also produce **inflammation** and **pain**. Therefore, antagonists are expected to be anti-**inflammatory**/analgesic drugs. Other exploitable clin. opportunities may exist. The newly discovered non-peptide B2 receptor antagonists and the equiv. B1 receptor pharmacol. agents, which are in the pipeline, are suitable preclin. tools to properly evaluate potential utilities.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
-----------	-------------------

ACCESSION NUMBER: 1993:401036 HCAPLUS
 DOCUMENT NUMBER: 119:1036
 TITLE: Therapeutic prospects of bradykinin receptor antagonists
 AUTHOR(S): Sharma, J. N.
 CORPORATE SOURCE: Sch. Med. Sci., Univ. Sains Malaysia, Kubang Kerian, 16150, Malay.

SOURCE: General Pharmacology (1993), 24(2), 267-74
 CODEN: GEPHDP; ISSN: 0306-3623
 DOCUMENT TYPE: Journal; **General Review**
 LANGUAGE: English

e journal = ADMIS

AB A review with 77 refs. Bradykinin (BK) and related kinins may act on 4 types of receptors designated as B1, B2, B3, and B4. It seems that the B2 receptors are most commonly found in various vascular and non-vascular smooth muscles, whereas B1 receptors are formed in vitro during trauma, and injury, and are found in bone tissues. These BK receptors are involved in the regulations of various physiol. and pathol. processes. The mode of kinin actions are based upon the interactions between the kinin and their specific receptors, which can led to activation of several second-messenger systems. Numerous BK receptor antagonists have been synthesized with prime aim to treat diseases caused by excessive kinin prodn. These diseases are RA, **inflammatory** diseases of the bowel, asthma, rhinitis and sore throat, allergic reactions, **pain**, **inflammatory** skin disorders, endotoxin and anaphylactic shock and coronary heart diseases. On the other hand, BK receptor antagonists could be contraindicated in hypertension, since these drugs may antagonize the antihypertensive therapy and/or may trigger the hypertensive crisis. It is worth suggesting that the BK receptor agonists might be useful antihypertensive drugs.

L8 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text **Citing References**

ACCESSION NUMBER: 1991:421390 HCAPLUS
 DOCUMENT NUMBER: 115:21390
 TITLE: Bradykinin antagonists in **pain** and **inflammation**
 AUTHOR(S): Steranka, Larry R.; Burch, Ronald M.
 CORPORATE SOURCE: Nova Pharm. Corp., Baltimore, MD, USA
 SOURCE: Inflammatory Disease and Therapy (1990), 5(Bradykinin Antagonists), 191-211
 CODEN: IDITE8; ISSN: 1047-5028
 DOCUMENT TYPE: Journal; **General Review**
 LANGUAGE: English

AB A review with 74 refs. discussing the effects of peptide bradykinin antagonists and certain kallikrein inhibitors on models of **inflammation** and **pain**.

=> d his

(FILE 'HOME' ENTERED AT 18:28:29 ON 06 JUN 2004)

FILE 'REGISTRY' ENTERED AT 18:28:56 ON 06 JUN 2004

FILE 'HCAPLUS' ENTERED AT 18:29:24 ON 06 JUN 2004

L1 908 S BRADYKININ AND PAIN?
 L2 535 S BRADYKININ () ?AGONIST
 L3 47 S L2 AND PAIN
 L4 0 S L3 AND DT/REVIEW
 L5 6 S L3 AND REVIEW/DT
 L6 117 S L2 AND INFLAMM?
 L7 14 S L6 AND REVIEW/DT
 L8 5 S L7 AND L5

=> s l2 and osteoarthritis?

5656 OSTEOARTHRIT?

L9 3 L2 AND OSTEOARTHRIT?

=> s 19 and review/dt

1732111 REVIEW/DT

L10 0 L9 AND REVIEW/DT

=> d 19, ibib abs, 1-3

L9 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Citing
Text References

ACCESSION NUMBER: 2003:633647 HCAPLUS
DOCUMENT NUMBER: 139:179895
TITLE: Preparation of N-biphenylmethyl
cycloalkanecarboxamides as bradykinin antagonists for
treatment of conditions associated with the bradykinin
B1 pathway.
INVENTOR(S): Wood, Michael R.; Anthony, Neville J.; Bock, Mark G.;
Feng, Dong-Mei; Kuduk, Scott D.; Su, Dai-Shi; Wai,
Jenny Miu-Chun
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066577	A1	20030814	WO 2003-US3338	20030204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

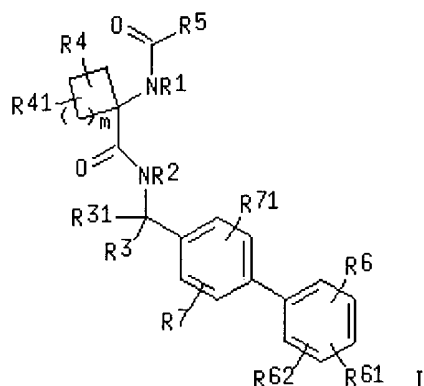
US 2003220375 A1 20031127 US 2003-354674 20030130

PRIORITY APPLN. INFO.: US 2002-355062P P 20020208

US 2002-410172P P 20020912

OTHER SOURCE(S): MARPAT 139:179895

GI



AB Title compds. [1; R1, R2 = H, alkyl; R3 = H, alkyl, haloalkyl; R31 = alkyl, haloalkyl; R4, R41 = H, halo, (substituted) alkyl; R4R41 = atoms to form (substituted) methylene; R5 = alkynyl, (substituted) alkyl, alkenyl, cycloalkyl, ar(alkyl), heterocyclyl(alkyl), etc.; R6 = cycloalkyl, halo, cyano, NO₂, (substituted) alkyl, alkenyl, amino, acylamino, heterocyclyl, acyl, etc.; R61, R62 = H, R6; R7, R71 = H, halo, cyano, NO₂, alkyl, haloalkyl, amino, CO₂H, etc.; m = 0, 1], were prepd. for treatment of pain and inflammation (no data). Thus, tert-Bu (1R)-1-[4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]ethylcarbamate (prepn. given), Me 2-fluoro-6-iodobenzoate, K₂CO₃, tri-o-tolylphosphine, and palladium acetate were heated at 90° for 18 h in THF/H₂O to provide Me 4'-[(1R)-1-[(tert-butoxycarbonyl)amino]ethyl]-3-fluoro-1,1'-biphenylcarboxylate. This was treated with HCl in MeOH to give an amine hydrochloride. The above amine hydrochloride along with 1-[(tert-butoxycarbonyl)amino]cyclopropanecarboxylic acid, HOBt.H₂O, triethylamine, and EDCI were stirred 16.5 h in THF to give 86% Me 4'-[(1R)-1-[[[1-[(tert-butoxycarbonyl)amino]cyclopropyl]carbonyl]amino]ethyl]-3-fluoro-1,1'-bibiphenyl-2-carboxylate. This was stirred with HCl in MeOH to give a solid amine hydrochloride. The above amine hydrochloride, trifluoropropionic acid, HOBt.H₂O, triethylamine, and EDCI in THF/DMF were stirred 18 h to give 67% Me 3-fluoro-4'-[(1R)-1-[[[1-[(3,3,3-trifluoropropanoyl)amino]cyclopropyl]carbonyl]amino]ethyl]-1,1'-bibiphenyl-2-carboxylate.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full
Text

ACCESSION NUMBER: 2003:470490 HCAPLUS
 DOCUMENT NUMBER: 139:53305
 TITLE: Preparation of N-benzenesulfonyl-L-proline compounds
 as bradykinin antagonists
 INVENTOR(S): Nukui, Seiji; Koike, Hiroki; Kawai, Makoto; Katsu,
 Yasuhiro
 PATENT ASSIGNEE(S): Pfizer Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003171377	A2	20030620	JP 2001-371081	20011205

PRIORITY APPLN. INFO.:

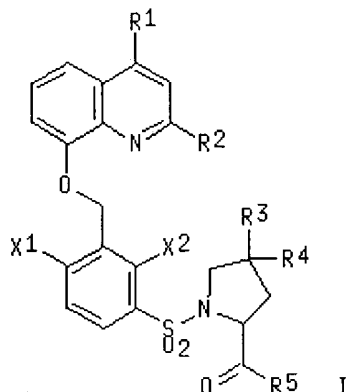
JP 2001-371081

20011205

OTHER SOURCE(S):

MARPAT 139:53305

GI



AB The title compds. (I) or pharmacol. acceptable salts thereof [X1, X2 = halo, C1-4 alkyl; R1, R2 = H, C1-4 alkyl; R3, R4 = H, halo; R5 = (a) C3-9 diazacycloalkyl optionally substituted C5-11 azabicycloalkyl, (b) C5-11 azabicycloalkyl optionally substituted by C3-9 azacycloalkyl-NH-(C1-4 alkyl), (c) -NH-C1-3 alkyl-CO-C5-11 diazabicycloalkyl, (d) -NH-C1-3 alkyl-CONH-C5-11 azabicycloalkyl where C5-11 azabicycloalkyl is optionally substituted by C1-4 alkyl, (e) C3-9 azacycloalkyl optionally substituted by C3-9 azacycloalkyl, (f) -NH-C1-5 alkyl-NHCO-C4-9 cycloalkyl-NH2] are prepd. These compds. are useful for the treatment of diseases mediated by bradykinin such as inflammation, chronic articular rheumatism, cystitis, brain edema after trauma, hemorrhage, or surgery, brain edema (general), liver cirrhosis, Alzheimer's disease, cardiovascular diseases, pain, cold, allergy, asthma, pancreatitis, burn, viral infection, head trauma, multiple trauma, rhinitis, liver-kidney failure, diabetes, metastasis, neovascularization, corneal opacity, glaucoma, ocular pain, high ocular pressure, amyotrophic lateral sclerosis, Huntington's disease, Parkinson's disease, multiple sclerosis, stroke, cytotoxic brain edema, brain edema related to metabolic disease, **osteoarthritis** (arthrosis deformans), migraine, neuropathic pain, itching, brain tumor, pseudo-brain tumor, hydrocephalus, spinal cord injury, spinal cord dropsy, neurodegenerative disease, respiratory disease, diuresis, increase in the excretion of sodium and potassium, chronic obstructive pulmonary disease, brain damage after trauma, and septicemia. Thus, (3S)-3-(1-piperazinyl)-1-azabicyclo[2.2.2]octane was condensed with N-[2,4-dichloro-3-(2,4-dimethylquinolin-8-yloxymethyl)phenylsulfonyl]-L-proline using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride and 1-hydroxybenzotriazole in CH₂Cl₂ at room temp. overnight to give 8-[[[3-[[[(2S)-2-[[[4-[(3S)-1-azabicyclo[2.2.2]octan-3-yl]-1-piperazinyl]carbonyl]-1-pyrrolidinyl]sulfonyl]-2,6-dichlorobenzyl]oxy]-2,4-dimethylquinoline. The compds. I showed IC₅₀ of 0.1-4 nM for inhibiting the binding of [3H]bradykinin to CHO-K1 cell membrane prepd. from monkey ileum.

L9 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
--------------	----------------------

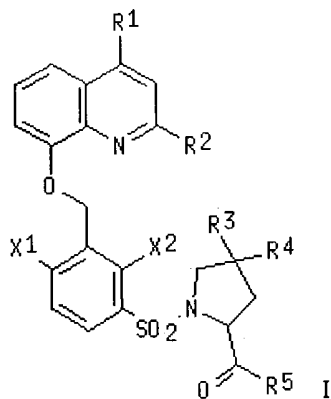
ACCESSION NUMBER: 2002:446120 HCAPLUS

DOCUMENT NUMBER: 137:33534

TITLE: Preparation of N-benzenesulfonyl-L-proline compounds
 as bradykinin antagonists
 INVENTOR(S): Katsu, Yasuhiro; Kawai, Makoto; Koike, Hiroki; Nukui,
 Seiji
 PATENT ASSIGNEE(S): Pfizer Inc., USA
 SOURCE: Eur. Pat. Appl., 19 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1213289	A1	20020612	EP 2001-310151	20011204
EP 1213289	B1	20031105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001005775	A	20020813	BR 2001-5775	20011204
AT 253575	E	20031115	AT 2001-310151	20011204
PT 1213289	T	20040130	PT 2001-310151	20011204
JP 2002220387	A2	20020809	JP 2001-371430	20011205
US 2002128271	A1	20020912	US 2001-10863	20011205
US 6734306	B2	20040511		

PRIORITY APPLN. INFO.: US 2000-251225P P 20001205
 OTHER SOURCE(S): MARPAT 137:33534
 GI



AB Proline derivs. I [X1, X2 = halo or C1-4 alkyl; R1, R2 = H or C1-4 alkyl; R3, R4 = H or halo; R5 = C3-9 diazacycloalkyl optionally substituted with C5-11 azabicycloalkyl, C3-9 azacycloalkyl-NH-(C5-11 azabicycloalkyl optionally substituted with C1-4 alkyl), NH-C1-3 alkyl-C(O)-C5-11 diazabicycloalkyl, NH-C1-3 alkyl-C(O)-NH-C5-11 azabicycloalkyl, the C5-11 azabicycloalkyl being optionally substituted with C1-4 alkyl, C3-9 azacycloalkyl optionally substituted with C3-9 azacycloalkyl, or NH-C1-5 alkyl-NHC(O)-C4-9 cycloalkyl-NH] or their pharmaceutically-acceptable salts were prepd. for the treatment of medical conditions mediated by bradykinin, e.g., inflammation, allergic rhinitis, and pain. Thus, 8-[[3-[[[(2S)-2-[[4-[(3S)-1-azabicyclo[2.2.2]oct-3-yl]-1-piperazinyl]carbonyl]pyrrolidinyl]sulfonyl]-2,6-dichlorobenzyl]oxy]-2,4-dimethylquinoline hydrochloride was prepd. via acylation of 3(S)-(1-piperazinyl)-1-azabicyclo[2.2.2]octane (prepn. given). The biol. activity of compds. of the invention was detd. by their ability to inhibit the binding of bradykinin at its receptor sites in recombinant human

bradykinin B2 receptor expressing CHO-K1 cells (IC50 values for the synthesized compds. were 0.1-4 nM).

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 18:28:29 ON 06 JUN 2004)

FILE 'REGISTRY' ENTERED AT 18:28:56 ON 06 JUN 2004

FILE 'HCAPLUS' ENTERED AT 18:29:24 ON 06 JUN 2004

L1 908 S BRADYKININ AND PAIN?
 L2 535 S BRADYKININ () ?AGONIST
 L3 47 S L2 AND PAIN
 L4 0 S L3 AND DT/REVIEW
 L5 6 S L3 AND REVIEW/DT
 L6 117 S L2 AND INFLAMM?
 L7 14 S L6 AND REVIEW/DT
 L8 5 S L7 AND L5
 L9 3 S L2 AND OSTEOARTHRITIS?
 L10 0 S L9 AND REVIEW/DT

=> s l2 and arthritis?

32678 ARTHRITIS?

L11 13 L2 AND ARTHRITIS?

=> s l11 and review/dt

1732111 REVIEW/DT

L12 1 L11 AND REVIEW/DT

=> d l12, ibib abs, 1

L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citing References

ACCESSION NUMBER: 1994:426082 HCAPLUS
 DOCUMENT NUMBER: 121:26082
 TITLE: New and highly potent bradykinin antagonists
 AUTHOR(S): Knolle, J.; Wirth, K.; Breipohl, G.; Henke, S.; Schoelkens, B.
 CORPORATE SOURCE: HOECHST AG, Frankfurt/Main, D-6230/80, Germany
 SOURCE: Actualites de Chimie Therapeutique (1993), 20, 259-64
 CODEN: ACHTD9; ISSN: 0338-8999
 DOCUMENT TYPE: Journal; **General Review**
 LANGUAGE: English
 AB A review with 15 refs. Results obtained with HOE 140 underline its unique properties and suggest its use in the therapy of allergic conditions, asthma and **arthritis**.

=>